



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,109	01/27/2004	Jon E. Kinzenbaw	Kinze 36	2193

7590 05/17/2006

James J. Hill
Emrich & Dithmar LLC
Suite 2080
125 South Wacker Drive
Chicago, IL 60606

EXAMINER

GREENHUT, CHARLES N

ART UNIT	PAPER NUMBER
----------	--------------

3652

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/766,109	KINZENBAW ET AL.	
	Examiner	Art Unit	
	Charles N. Greenhut	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

I. Claim Objections

1. Claims 2, 9, and 12 are objected to because applicant has misused double brackets to indicated added language as opposed to deleted. See CFR § 1.121. Examiner assumes the text within double brackets is intended to be inserted into the claims.
2. Claim 10 and 13 are objected to because “said shaft of said forward hub” in line 1 should read “a shaft of said forward hub”
3. Claim 11 is objected to because “said front hub” in line 8, should read, “said forward hub”.

II. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DAVIS (US 5,468,113 A) in view of HAGEMEYER (US 5,669,531 A) and ALMS (US 4,140,248 A).
 - 1.1. With respect to claim 1, DAVIS teaches a frame (13), hopper (12), ground engaging transport means (Fig. 1), auger (Fig. 9), trough (bottom of 12), forward and rear hubs (Fig. 9), and a clean out pan (134). DAVIS fails to teach the trough and flighting defining a curved recess and the clean out pan for reciprocal movement clearing residue. HAGEMEYER teaches the trough and flighting defining a curved recess (Fig. 2). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the recess of HAGEMEYER to minimize the amount of residue that may

collect under the auger. ALMS teaches a clean out pan for reciprocal movement clearing residue (Fig. 2). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the pan of ALMS in order to remove residue from under the auger.

1.2. With respect to claim 2, DAVIS additionally teaches an unload auger (18) a discharge opening (32). DAVIS fails to teach a cover. HAGEMEYER teaches a cover (66). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the cover of HAGEMEYER in order to selectively allow grain to flow through the aperture.

1.3. With respect to claim 3, DAVIS additionally teaches an elongated rod (at 134).

1.4. With respect to claim 4, DAVIS additionally teaches an elongated recess (Fig. 1).

1.5. With respect to claim 6, DAVIS additionally teaches the auger mounted at the front and rear. DAVIS fails to teach an unobstructed recess. ALMS teaches an unobstructed recess. It would have been obvious to one of ordinary skill in the art to modify DAVIS with the recess of ALMS to allow access to the residue for cleaning.

1.6. With respect to claim 7, DAVIS additionally teaches a drive member having a plurality of dowels (Fig. 9), and a plate defining bores (166). DAVIS fails to teach a tube carrying the flighting. HAGEMEYER teaches a tube (52) carrying the flighting. It would have been obvious to one of ordinary skill in the art to modify DAVIS with the tube of HAGEMEYER in order to reduce the weight of the auger.

1.7. With respect to claim 8, DAVIS additionally teaches a removable panel (30).

2. Claim(s) 5 s/are rejected under 35 U.S.C. 103(a) as being unpatentable over DAVIS in view of HAGEMEYER and ALMS and further in view of GRIESHOP (US 5,340,265 A).

2.1. With respect to claim 5, DAVIS fails to teach an upper section pivotally mounted to the lower and a stand. GRIESHOP teaches an upper section pivotally mounted to the lower and a stand (Figs 1-4). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the two piece hinged connection of GRIESHOP in order to minimize the storage spaced required for the apparatus when not in use.

3. Claim(s) 9-13are rejected under 35 U.S.C. 103(a) as being unpatentable over DAVIS (US 5,468,113 A) in view of HAGEMEYER (US 5,669,531 A) and further in view of PHILLIPS (US 5,765,961 A)

3.1. With respect to claim 9, DAVIS additionally teaches an idler shaft, a flange, and apertured plate (Fig. 9). DAVIS fails to teach the flange having pins received in the apertured plate, tapered shaft and roller bearings. PHILLIPS teaches a flange (56)/(64) having pins (62) received in an aperture plate (56)/(64), a tapered shaft (52)/(30), and forward and rear tapered roller bearings (40)/(42). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the flange having pins received in the apertured plate of PHILLIPS in order to increase the torsional rigidity of the auger. It would have been obvious to one of ordinary skill in the art to modify DAVIS with the tapered shaft of PHILLIPS in order to facilitate alignment and increase the axial load capacity of the auger. It would have been obvious to one of ordinary skill in the art to modify DAVIS with the tapered roller bearings of

PHILLIPS in order to reduce the friction on, and increase the radial rigidity of, the auger.

3.2. With respect to claim 10 DAVIS fails to teach forward and rear tapered roller bearings. PHILLIPS teaches forward and rear tapered roller bearings (40)/(42). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the tapered roller bearings of PHILLIPS in order to reduce the friction on, and increase the radial rigidity of, the auger.

3.3. With respect to claim 11, DAVIS teaches a frame (13), hopper (12), ground engaging transport means (Fig. 1), trough (bottom of 12), auger having flighting (Fig. 9), forward and rear hubs (Fig. 9), drive member (66), a plurality of drive dowels (Fig. 9), plate (166), and removable panel (30). DAVIS fails to teach the plate defining bores for receiving the dowels and auger having a tube. HAGEMEYER teaches the auger having a tube (52). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the tube of HAGEMEYER in order to reduce the weight of the auger. PHILLIPS teaches the plate defining bores for receiving the dowels (Fig. 3). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the coupling of PHILLIPS in order to increase the torsional rigidity of the auger.

3.4. With respect to claim 12, DAVIS additionally teaches an idler shaft and a flange (Fig. 9). DAVIS fails to teach forward and rear tapered roller bearings, the flange including a plurality of pins received in an apertured plate. PHILLIPS teaches a flange (56)/(64) having pins (62) received in an aperture plate (56)/(64), and forward and rear tapered roller bearings (40)/(42).). It would have been obvious to one of

ordinary skill in the art to modify DAVIS with the flange having pins received in the apertured plate of PHILLIPS in order to increase the torsional rigidity of the auger. It would have been obvious to one of ordinary skill in the art to modify DAVIS with the tapered roller bearings of PHILLIPS in order to reduce the friction on, and increase the radial rigidity of, the auger.

3.5. With respect to claim 13, DAVIS fails to teach forward and rear tapered roller bearings. PHILLIPS teaches forward and rear tapered roller bearings (40)/(42). It would have been obvious to one of ordinary skill in the art to modify DAVIS with the tapered roller bearings of PHILLIPS in order to reduce the friction on, and increase the radial rigidity of, the auger.

III. Response to Applicant's Arguments

Applicant's arguments entered 3/13/06 have been fully considered and are not persuasive.

1. With respect to claim 1, applicant argues that DAVIS does not disclose a clean out pan that is passed along the bottom of the auger to clear the recess beneath it. This argument is not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "[a clean out pan that] is passed along the bottom of the auger to clear the recess beneath it") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.
2. With respect to claim 1, applicant further argues that DAVIS fails to teach the clean out pan "for reciprocal movement in said recess parallel to said access of said auger for removing residual grain in said recess." This argument is not persuasive. Firstly, ALMS, not DAVIS

was not cited for this feature. Secondly, this is a functional limitation. A functional limitation must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The ALMS pan is clearly capable of performing this function.

3. With respect to claim 1, applicant further argues that since the auger of ALMS is not readily removable, ALMS teaches away from the claimed invention. This argument is not persuasive. ALMS is used solely to teach that it is known to use a clean out pan sliding under the auger. Applicant admits that ALMS does not specifically discuss the auger mounting in detail. ALMS, therefore, in no way criticizes, discredits, or otherwise discourages the solution claimed of making the auger readily removable. ALMS, therefore, in no way teaches away from the claimed invention.
4. With respect to claim 1 and 6, applicant further argues that it would be impossible to combine the structure of DAVIS with that of ALMS. This argument is not persuasive. The test for obviousness is not whether the features of the secondary reference ALMS may be bodily incorporated into the structure of the primary reference DAVIS, the test is what the combined teachings of DAVIS and ALMS would have suggested to those of ordinary skill in the art. It is not necessary that the inventions of DAVIS and ALMS be physically combinable to render obvious the invention under review. Combining the teachings of DAVIS and ALMS does not require the ability to combine their specific structures.
5. With respect to claim 2, applicant argues that neither DAVIS nor ALMS teach “an axial moveable pain [sic] urging residue to both the front and rear of the hopper.” This argument is

not persuasive. Firstly, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "an axial moveable pain [sic] urging residue to both the front and rear of the hopper") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Secondly, this is a functional limitation. A functional limitation must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The ALMS pan is clearly capable of performing this function.

6. With respect to claim 2, applicant argues that HAGEMEYER does not teach a cover. This argument is not persuasive. HAGEMEYER clearly teaches removably securing a cover to a hopper to close a discharge opening at both (44) and (66), as best seen in Fig. 9.
7. With respect to claim 4, applicant argues that DAVIS fails to disclose an elongated recess for storing the rod when not in use. This argument is not persuasive. A functional limitation must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. DAVIS clearly discloses a number of areas that could be considered an elongated recess capable of storing the rod when not in use.
8. With respect to claim 7, applicant argues that DAVIS fails to disclose a "slide in" or "quick disconnect" coupling. This argument is not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the

features upon which applicant relies (i.e., “a “slide in” or “quick disconnect” coupling”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

9. With respect to claim 7, applicant further argues that the purpose of the tube of HAGEMEYER is different from that of applicant. This argument is not persuasive. While there must be a motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention.
10. With respect to claim 9, applicant argues that PHILLIPS does not teach a pin because a pin can't have threads. This argument is not persuasive. The term “pin,” as it is commonly used, does not necessarily exclude a threaded bolt.
11. With respect to claim 11, applicant argues that there is no motivation to combine HAGEMEYER or PHILLIPS with DAVIS. This argument is not persuasive. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Firstly, it should be noted that there is no requirement that an express, written motivation to combine must appear in prior art references before a finding of obviousness. In addition to the teachings of the references themselves, the motivation to combine references may be found in the nature of the problem to be solved or the knowledge of persons of ordinary skill in the art. Furthermore, while there must be a motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention. In this case, the

motivation to modify DAVIS with the teaching of HAGEMEYER comes from the fact that one of ordinary skill in the art would recognize the advantages of a tubular auger, for example a reduction in weight. The motivation to modify DAVIS with the teaching of PHILLIPS comes from the fact that one of ordinary skill in the art would recognize the advantages of a flanged drive dowel arrangement, for example, increasing torque transmission capabilities.

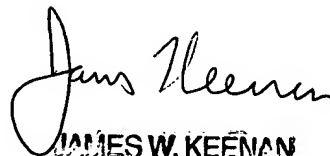
IV. Conclusion

1. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
2. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.

Art Unit: 3652

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CG


JAMES W. KEENAN
PATENT EXAMINER